

CLAIMS

1. A vacuum actuated automatic door latching assembly for unlocking a door of a delivery vehicle, comprising:

- a. a latch operatively associated with the door for latching the door, the latch movable between the lock and unlocked positions;
- b. a pneumatic actuator operatively associated with the latch for causing the latch to move between the locked and unlocked positions;
- c. a vacuum line connected to the pneumatic actuator and adapted to connect to a vacuum source associated with the vehicle;
- d. a control valve disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator; and
- e. a biasing device engaging the door and biasing the door towards an open position.

2. The door latching assembly of claim 1 wherein the latch includes a locking lever that is pivotally mounted and movable between a locked and unlocked position, wherein the pneumatic actuator includes an arm that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions.

3. The door latch assembly of claim 1 where the latch assembly includes a conventional key lock but wherein the pneumatic actuator is operative to actuate the latch independent of the key lock.

4. The latching assembly of claim 2 wherein the locking lever is of a generally L-shape and includes a terminal end portion that includes a catch for engaging a receiver secured to the door to be latched.

5. The door latching assembly of claim 1 further including a delivery vehicle having a load compartment and a sliding door that permits access to the load compartment and wherein the latching assembly is mounted adjacent the sliding door and wherein the vehicle includes an engine that serves as the vacuum source for actuating the pneumatic actuator.

6. The latching assembly of claim 1 wherein the biasing device includes a spring.

7. The latching assembly of claim 6 wherein the spring is adapted to extend between a stop disposed on the door and an area adjacent the door, and wherein the position of the spring is adjustable with respect to the door.

8. The latching assembly of claim 7 wherein the spring is at least partially contained within a sleeve.

9. The latching assembly of claim 8 wherein the spring is fixed to a threaded bolt that extends at least partially through the sleeve and which can be adjusted with respect to the door.

10. A delivery vehicle having a vacuum actuated latch assembly for latching an access door to a load compartment, comprising:

- a. an engine for powering the vehicle;
- b. a compartment for receiving and holding a load;
- c. a sliding door for permitting access to the compartment of the vehicle;
- d. a vacuum actuated latch assembly for automatically unlocking the door, the vacuum actuated latch assembly comprising:

- i. a latch operatively associated with a door for locking the door;
- ii. the latch being movable between a locked and an unlocked position;
- iii. a pneumatic actuator operatively associated with said latch for causing the same to move between the locked and unlocked position;
- iv. a vacuum line connected to the pneumatic actuator and extending to the engine of the vehicle such that the engine of the vehicle serves as a vacuum source for the pneumatic actuator; and
- v. a control valve disposed between the engine and the pneumatic actuator for controlling the actuation of the pneumatic actuator.

11. The delivery vehicle of claim 10 wherein the pneumatic actuator includes a pneumatic cylinder.

12. The delivery vehicle of claim 11 wherein the latch includes a locking lever for engaging a receiver secured to the door, and wherein the pneumatic actuator includes an arm for engaging and moving the locking lever from a locked position to an unlocked position.

13. The delivery vehicle of claim 11 wherein the pneumatic actuator can only be actuated to unlatch the latch when the engine of the vehicle is running.

14. The delivery vehicle of claim 13 wherein the latch normally assumes a locked position, and wherein the arm that extends from the pneumatic actuator is operative upon the actuation of the pneumatic actuator to engage the latch and move the latch to the unlocked position.

15. A method of unlocking a door to a load compartment of a delivery vehicle comprising: directing a vacuum from an engine of the vehicle through a line to a pneumatic actuator that is operatively associated with a latch that operates to lock the access door and which is movable between a locked position and an unlocked position; utilizing the vacuum to actuate the pneumatic actuator and wherein the actuation of the pneumatic actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the access door to open; shutting the engine off; and closing the access door causing the latch to lock the access door.

16. The method of claim 15 including biasing the access door towards an open position while the latch assumes the locked position and locks the access door closed.

17. The method of claim 16 wherein biasing the access door towards an open position includes securing a spring adjacent to the access door and extending the spring to where the spring engages a stop that extends from the access door such that the spring pushes on the stop and effectively biases the access door towards an open position.

18. The method of claim 15 including actuating a control valve that is effective to permit the vacuum to reach the pneumatic actuator and wherein when the vacuum reaches the pneumatic actuator, the pneumatic actuator is actuated which results in the latch being engaged and moved to the unlocked position.

19. The method of claim 15 wherein the pneumatic actuator includes an arm that extends past a portion of a locking lever that forms a part of the latch assembly; wherein the actuation of the pneumatic actuator causes the arm to move and to engage a portion of the locking lever which results in the locking lever being pulled from its locked position to an unlocked position.

20. The method of claim 19 wherein the locking lever is pivotally mounted for movement about an axis and wherein the actuation of the pneumatic actuator causes the locking lever to rotate from a locked position to an unlocked position.